

SOFTWARE FOR THE APPLE II+, IIe, IIc, IIGs

CHEM LAB



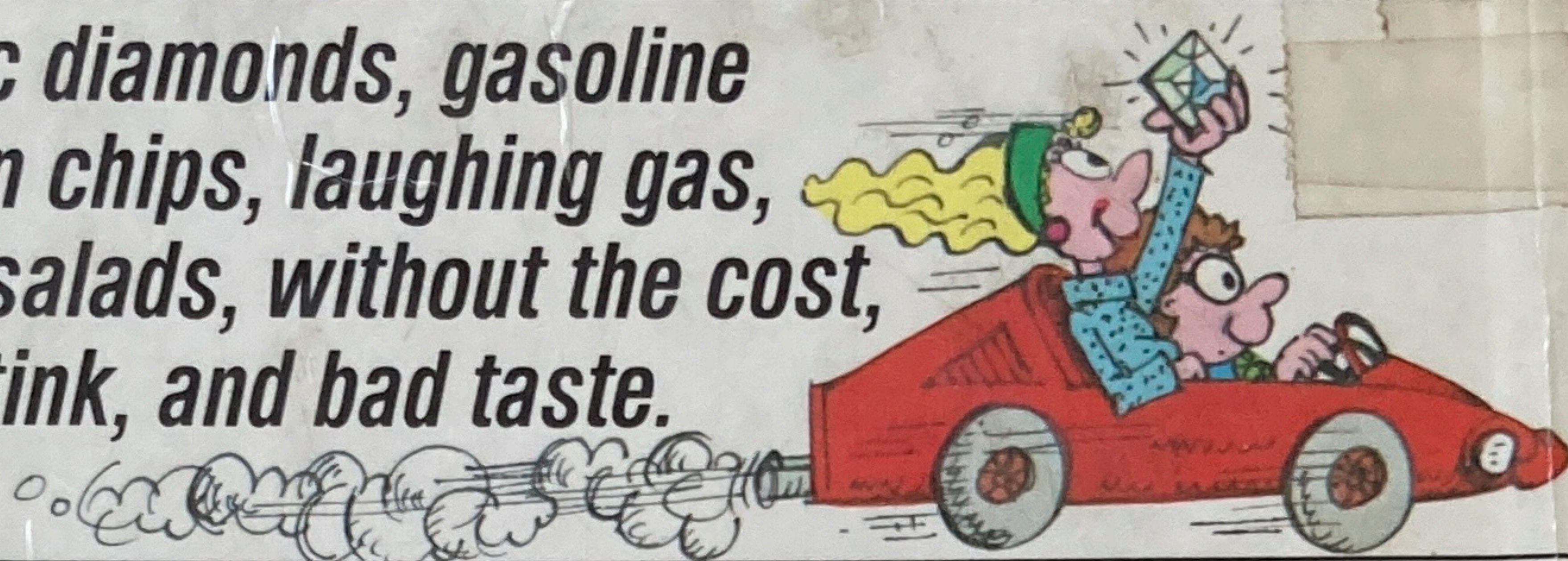
*Turn your computer into an
awesome chemistry lab.*

Complete with 50 different experiments.

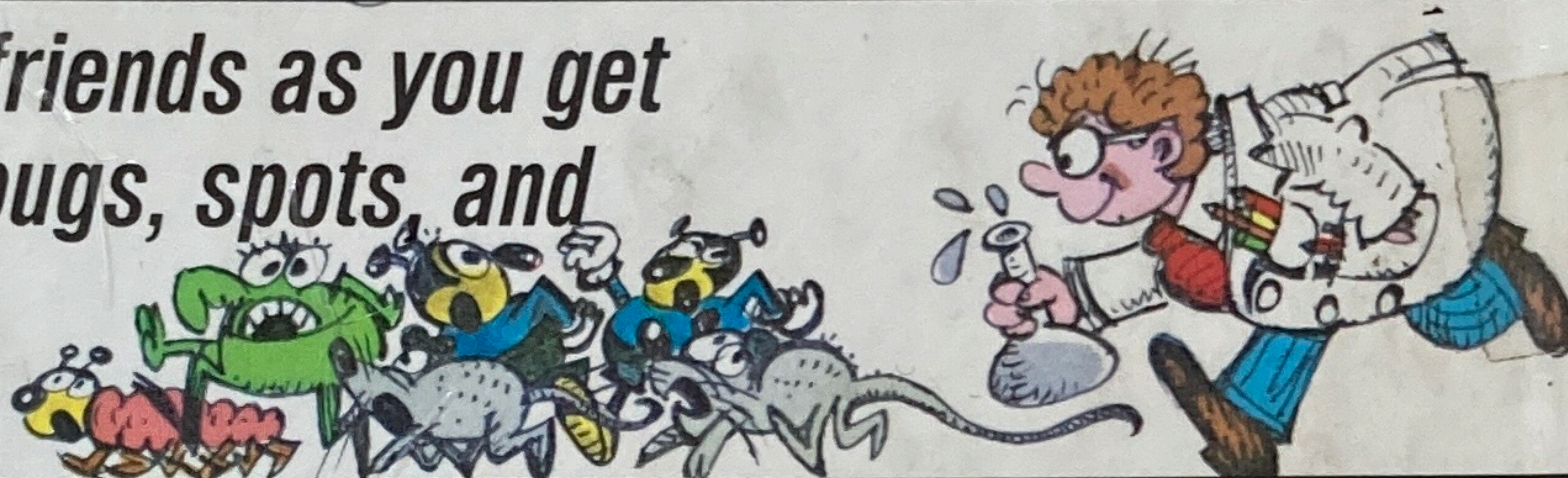
*Thousands of chemical reactions
that explode, boil over and go crazy
when you least expect it.*

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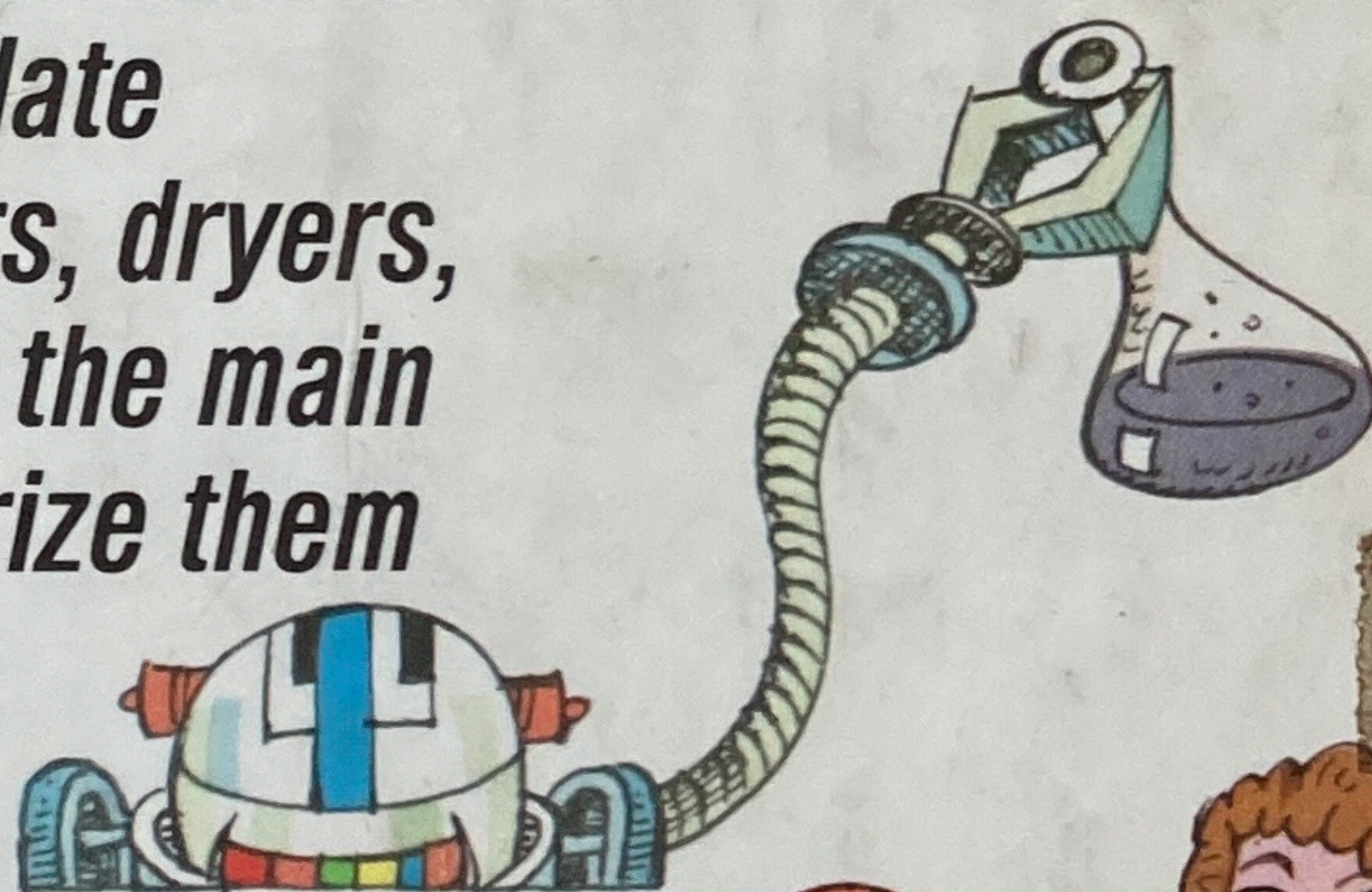
MAKE synthetic diamonds, gasoline additives, silicon chips, laughing gas, and vinegar for salads, without the cost, smoke, mess, stink, and bad taste.



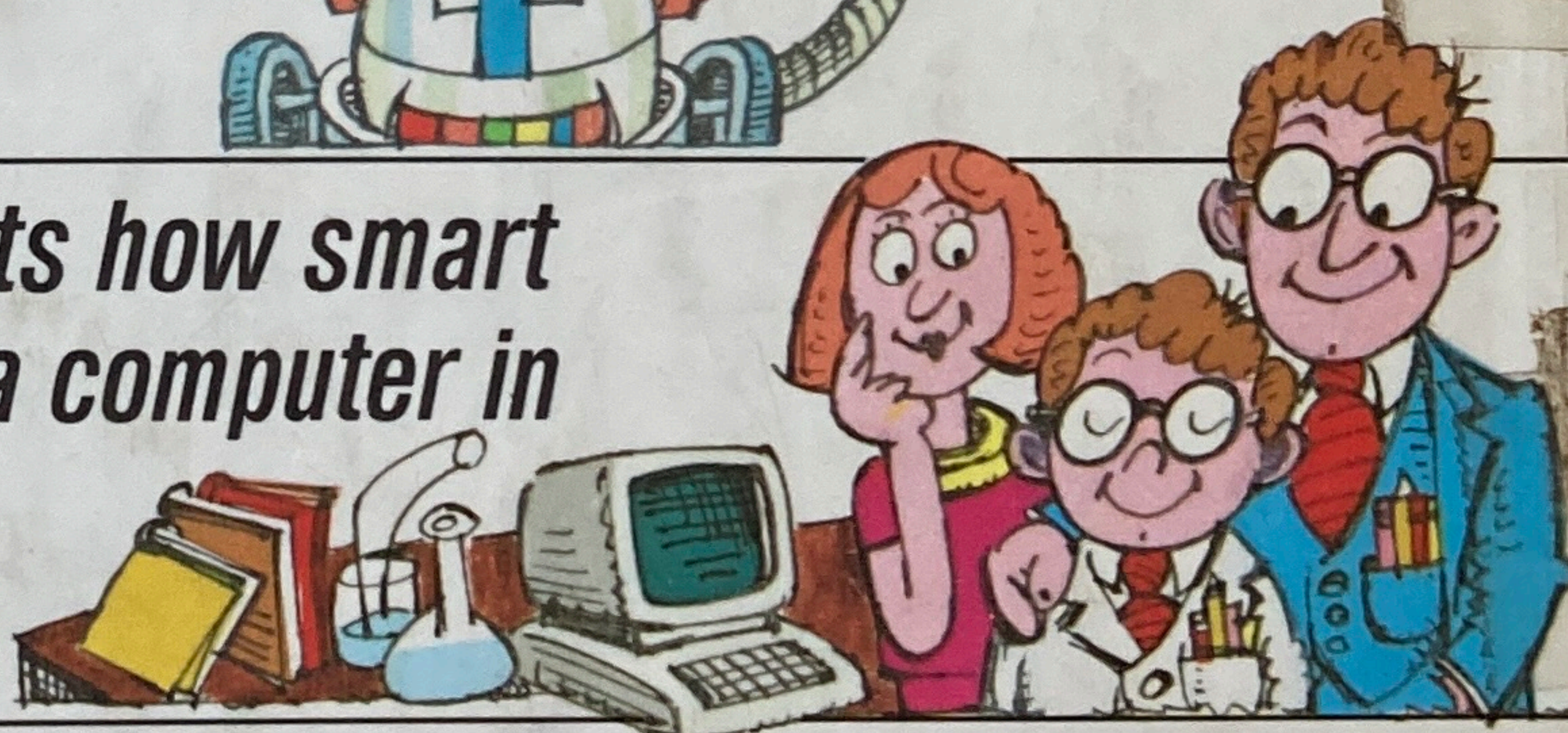
IMPRESS your friends as you get rid of rust, rats, bugs, spots, and indigestion.



USE robot arms to manipulate beakers, flasks, condensers, dryers, and Bunsen burners inside the main lab. Superheat and pressurize them in special chambers.



PROVE to your parents how smart they were to buy you a computer in the first place.



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Carl Fischer

Requires 64K RAM and one disk drive
and uses DOS 3.3. Runs on the IIs
in Apple II emulation mode.



ISBN 0-671-67544-3

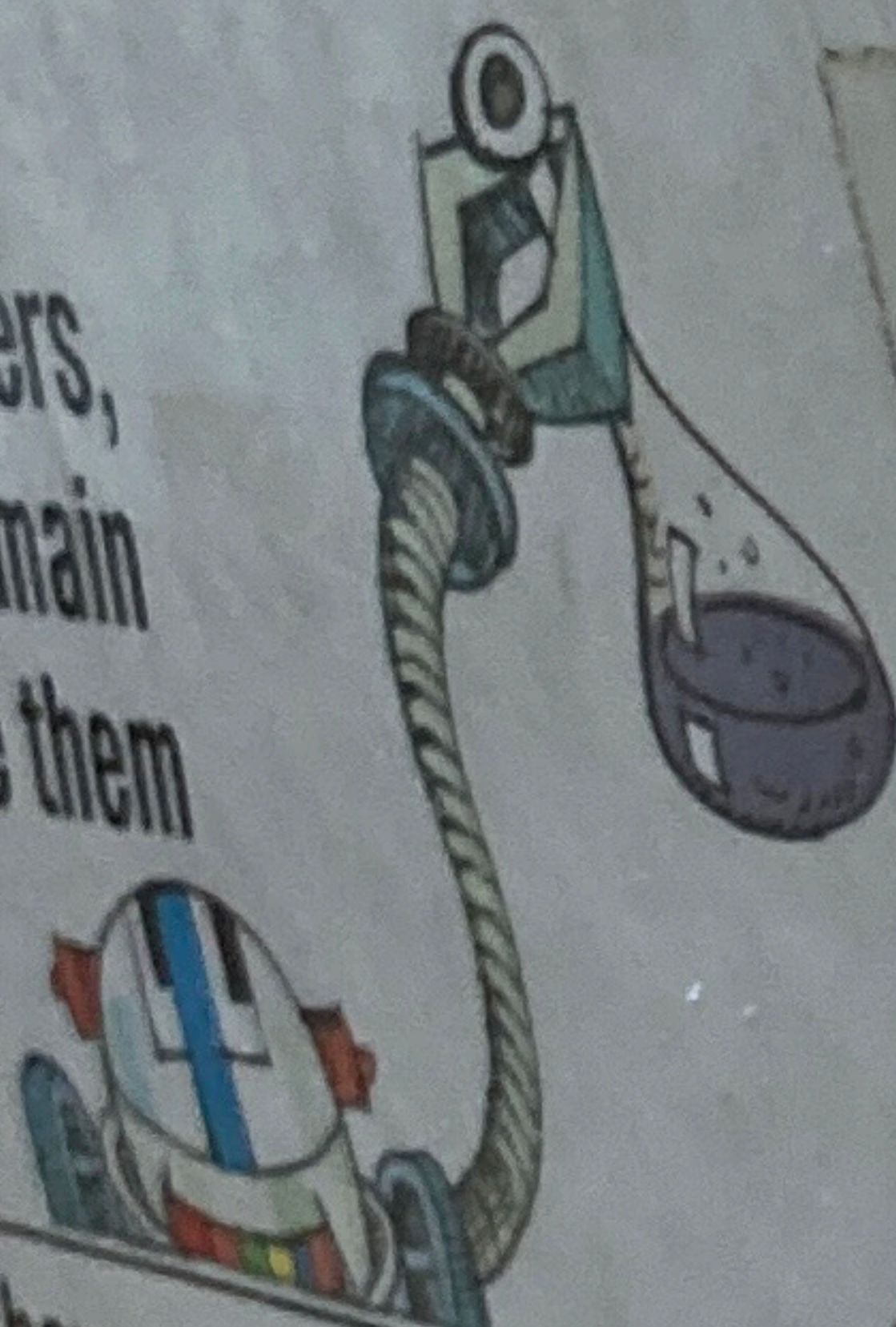
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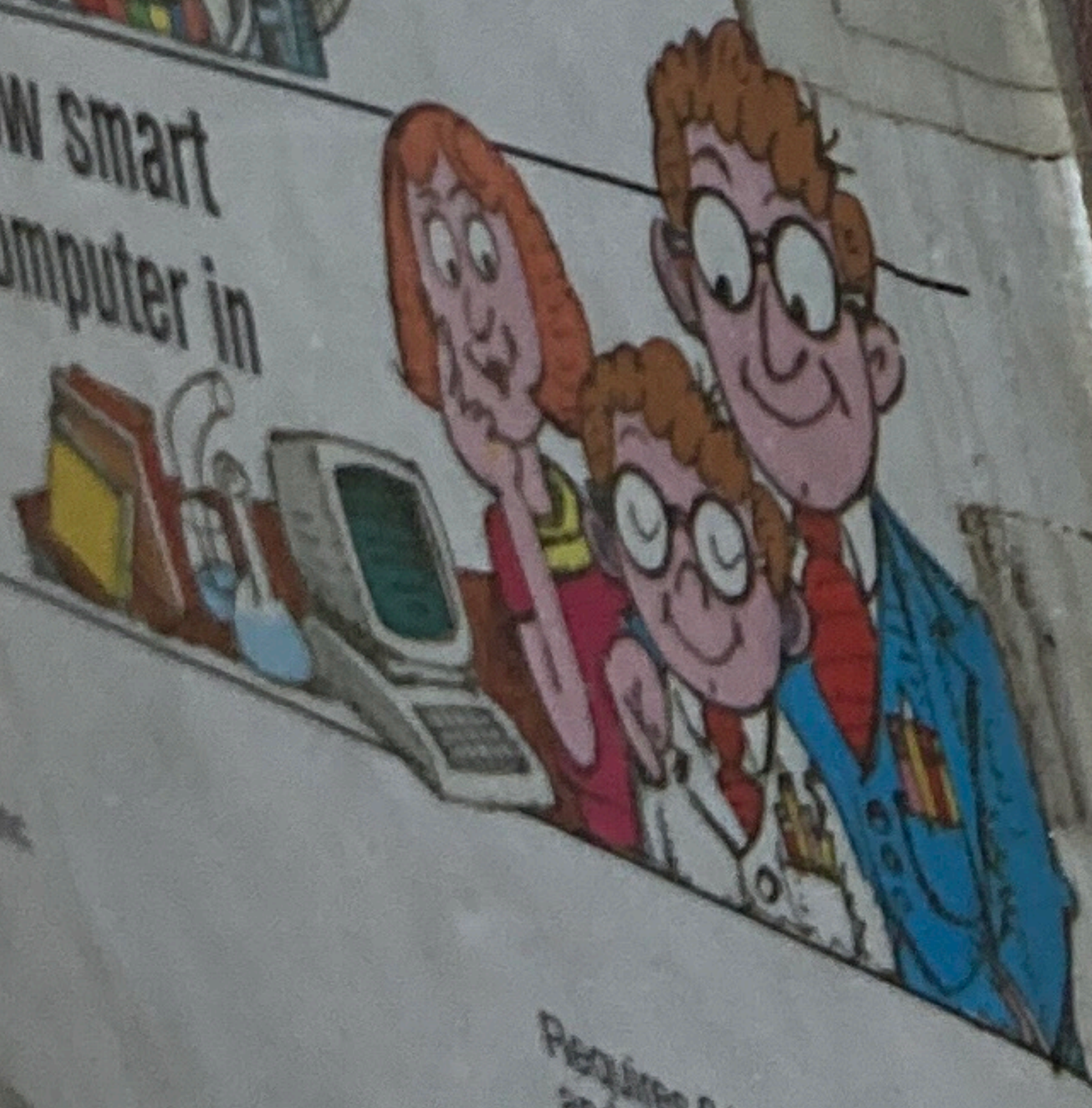
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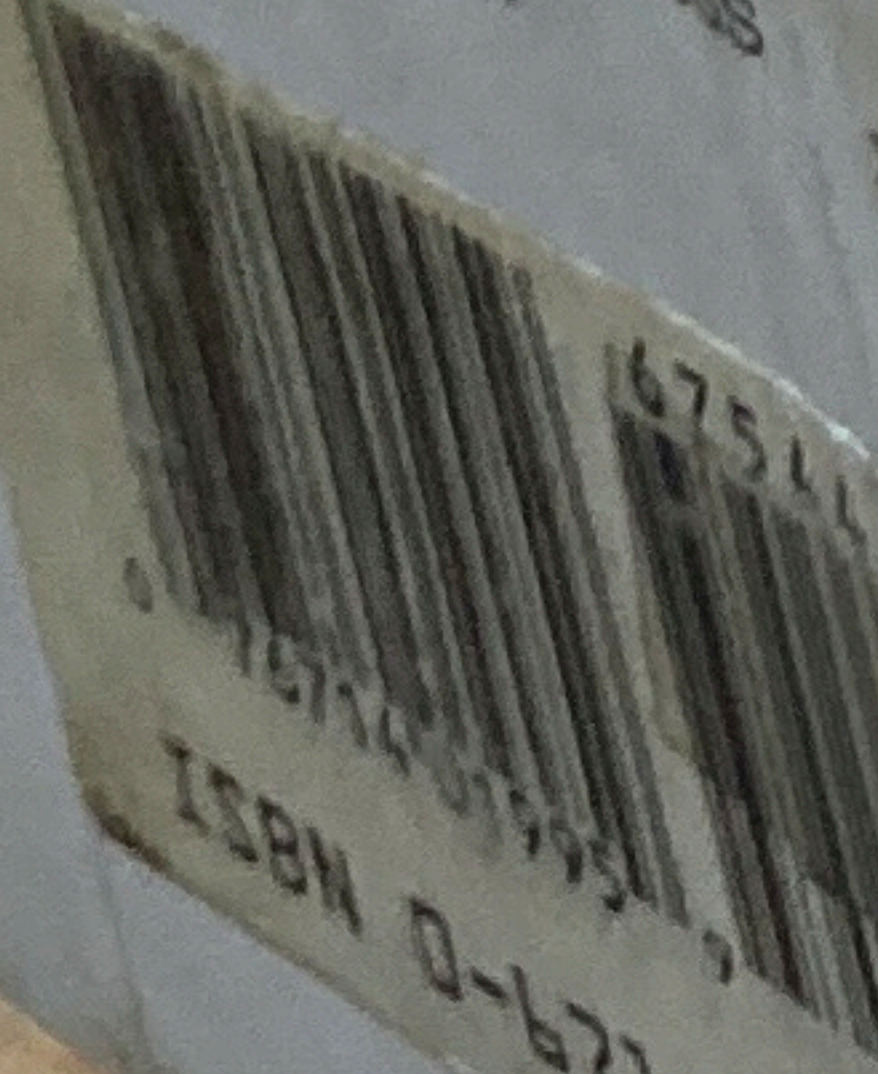
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Chem Lab

SOFTWARE FOR THE APPLE II+, IIe, IIc, IIs

SIMON & SCHUSTER

SOFTWARE FOR THE APPLE II+, IIe, IIx, IIfx

CHEM LAB

Turn your computer into an
awesome chemistry lab.
Complete with 50 different experiments.
Thousands of chemical reactions
that explode, boil over and go crazy
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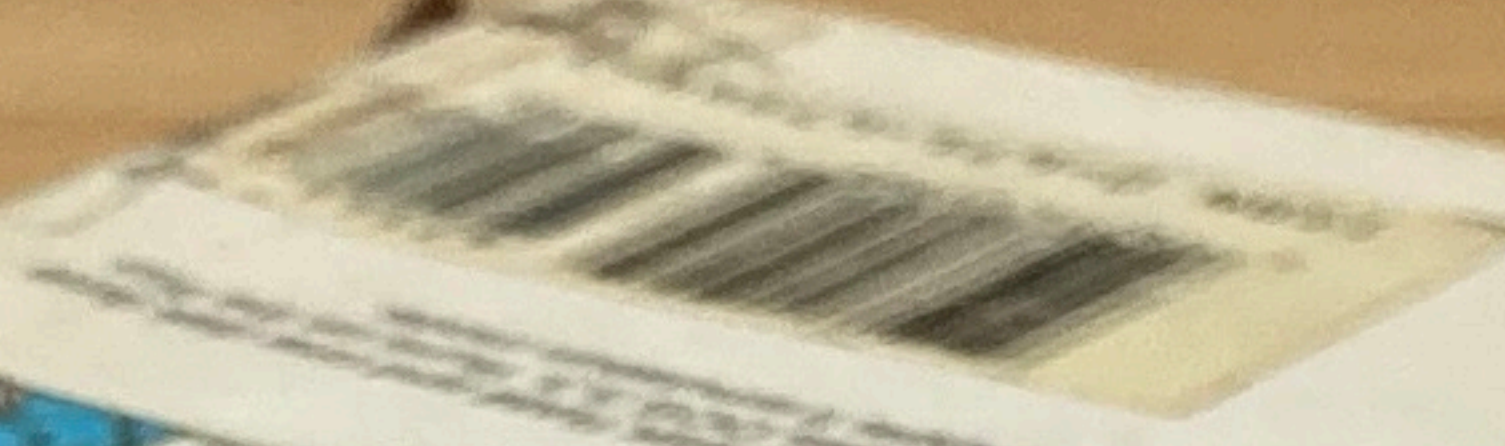
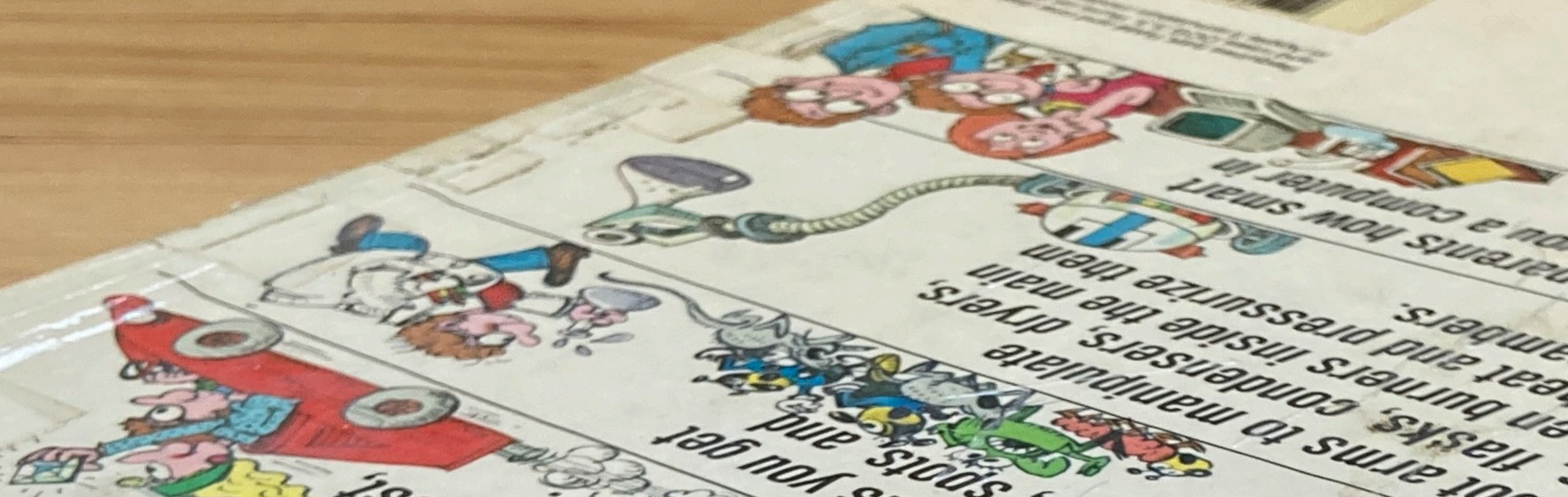


MAKE synthetic diamonds, gasoline
additives, silicon chips, laughing gas,
and vinegar for salads, without the cost,
smoke, mess, stink, and bad taste.

IMPRESS your friends as you get
rid of rust, rats, bugs, spots, and
indigestion.

USE robot arms to manipulate
lab, Superheat and pressurize them
in special chambers.

PROVE to your parents how smart
they were to buy you a computer in
the first place.





WORKS without batteries, electricity, motors, control chips, anything else, and even in space, without the usual wires, gears, clock, and ball bearings.

IMPRESS your friends as you get your car, boat, house, sports car, etc.

USE robot arms to manipulate levers, loads, condensers, drivers and sensor burners inside the main set. Superheat and pressurize them in special chambers.

PROVE to your parents how smart they were to buy you a computer in the first place.

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CHEM LAB

Computer Software Division
Simon & Schuster, Inc.
New York, N.Y.

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Special Notes about Gases

- To stop the gas from flowing, press V. Then press Q to quit the flow of gas. You may then close the appropriate valves.

If you follow the directions on the screen, you won't go wrong.

If you plan to use gas in your experiment, it is wise to bring up a flask from the basement as soon as you enter the main lab, and place it under valve 2 or 4, where it will be ready to receive gas. Remember, once a piece of equipment is filled, it can't be moved.

Also, always *add gas last* to any mixture, because to add gas, you have to cork your flask. And once a flask is corked or sealed, it can't be uncorked. Solids or liquids cannot be added to a corked flask—only gas.

Bunsen Burners

When you're in the middle of an experiment, the heat's on you to find the right solution. And heat can sometimes be the key to getting the right chemical reaction! So it's handy to have a *Bunsen burner* to help you turn the heat on any chemical combination. There are three burners available. They are stationed at the bottom of the lab (not in the basement). Here's how they work:

- Type B to *activate* the burners. Instructions will appear.
- First, you must raise the burner you want to light. Press R to raise a burner. You'll be asked which burner you want raised.
- Enter the number of the burner you want to light: 1 (left), 2 (middle), or 3 (right). (You can light more than one.) It will appear at the bottom of the screen. It's not lit yet, just warming up for action!
- Now press E to light the burner. The flame is struck!
- When you're done heating, press B again.
- To lower the burner, press L, and enter the number of the burner you want to remove.
- Press E to exit, and you're ready to roll again!

CHEMISTRY IS EVERYWHERE

Now that you have become such a chemical whiz, here are a few things you will want to know. Keep them in mind as you experiment with Chem Lab, and they will stretch and build your mental muscles.

It's Elementary

Everything that's anything is a matter of chemistry.

That may sound odd, but think: As you now know, everything in the world is made of matter, and matter is made of chemicals! But being the brain that you are, your sharp mind doesn't stop there. So you ask the question: What are chemicals made of?

The answer is elementary, of course: *Elements* make up all the chemicals we know. In fact, there are about one hundred elements that combine and react to make the millions of substances we find on earth.

Some elements are as common as the aluminum in a soda can; some are as precious as gold or silver. Sometimes elements are right before your eyes, and you've never known it: as when you're at the beach at night and the waves seem to glow in the dark. That's phosphorus at work! Others are helping you right now—like the silicon in the chips in your computer!

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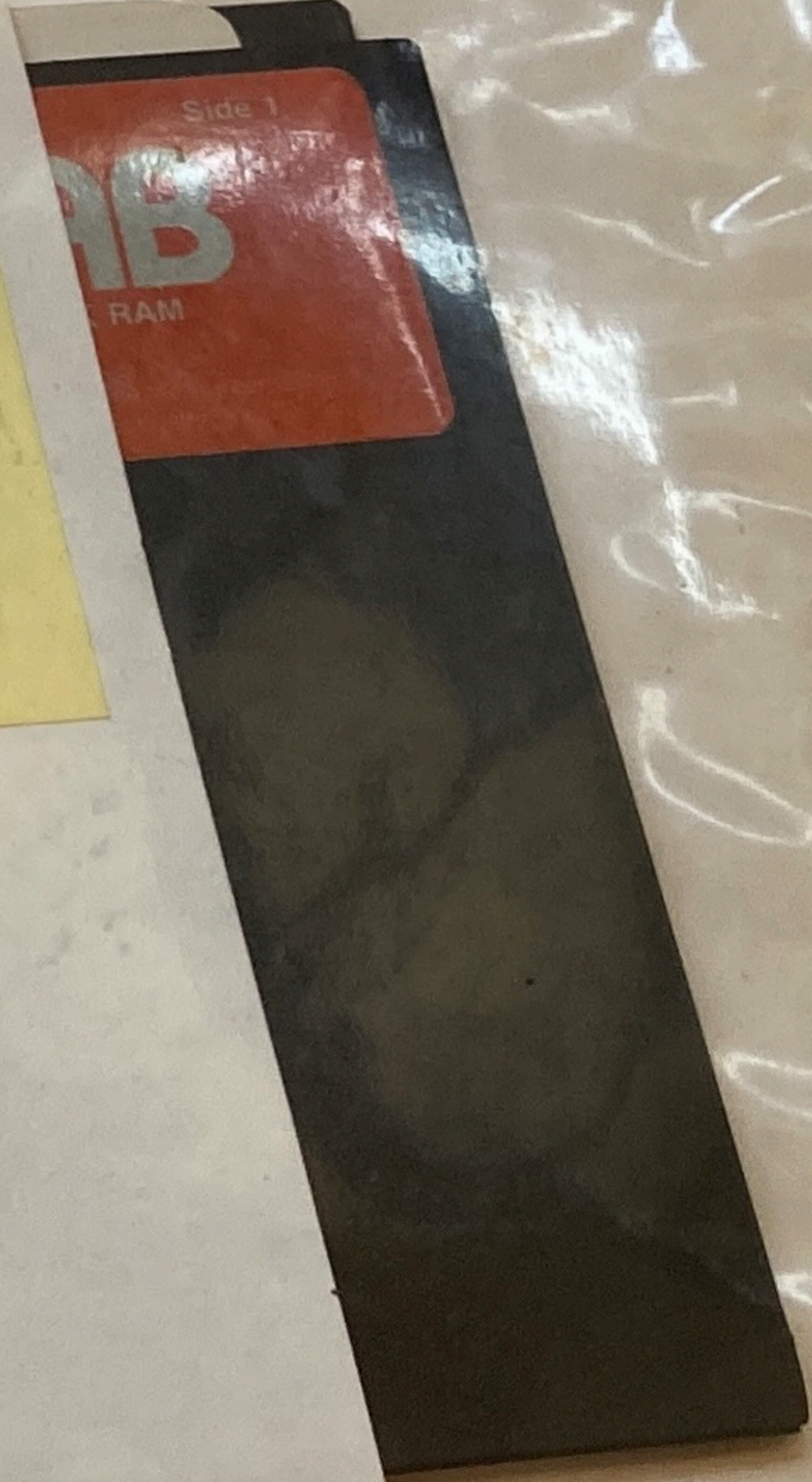
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22

14 I/O boards
on side 1

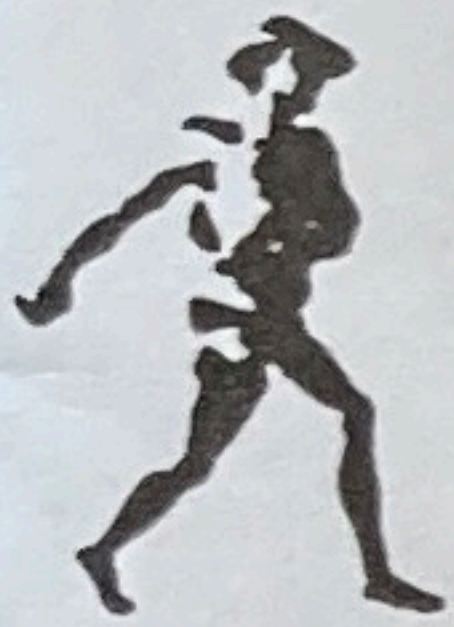


Chem Lab for the Apple II+, IIc & IIe
with 64K RAM

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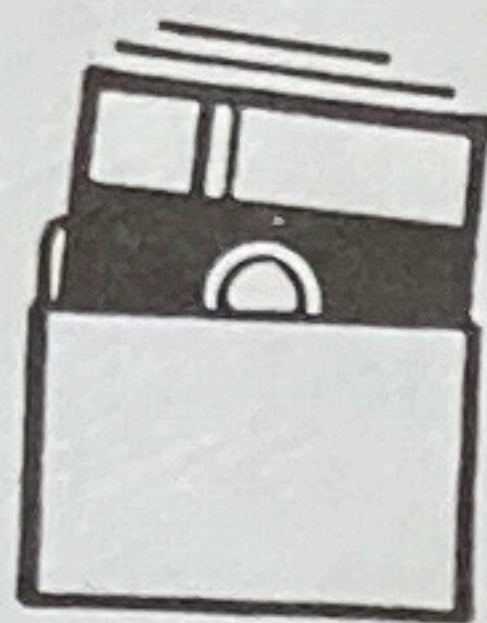
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14 I/O Records
ON SIDE 1

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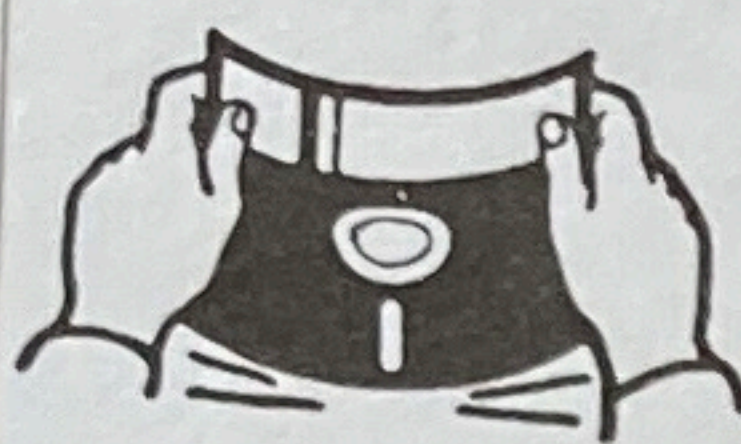
Side B



Protect
Proteger
Protéger
Schützen
保護



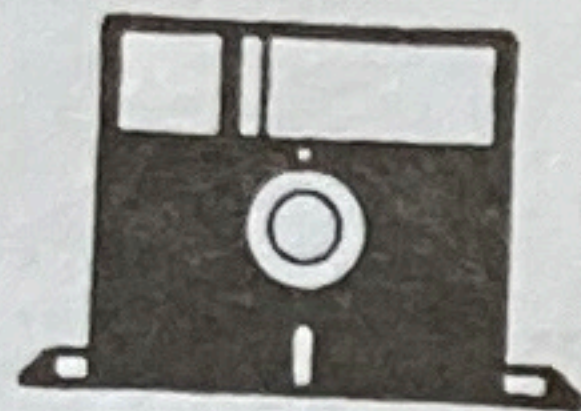
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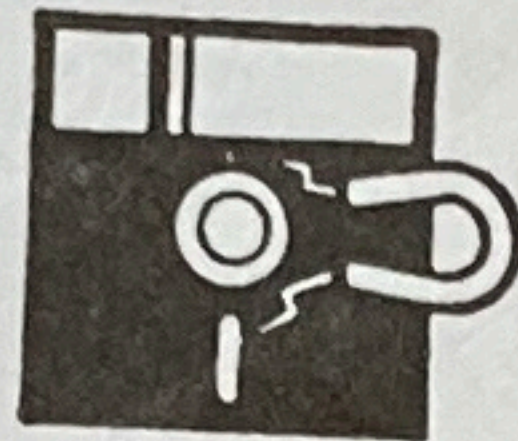
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10°C→52°C
50°F→125°F



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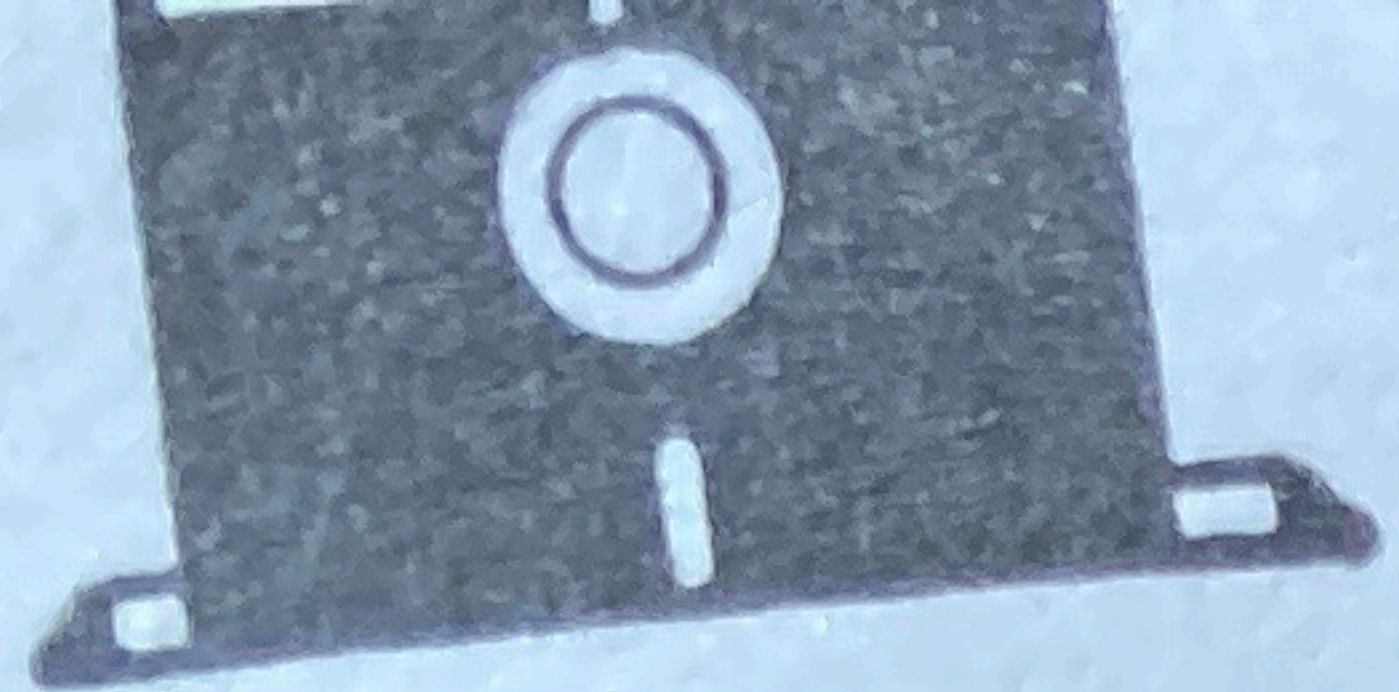
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Side 2

CHEM LAB

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Sorgfältig Einsetzen
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Side 2

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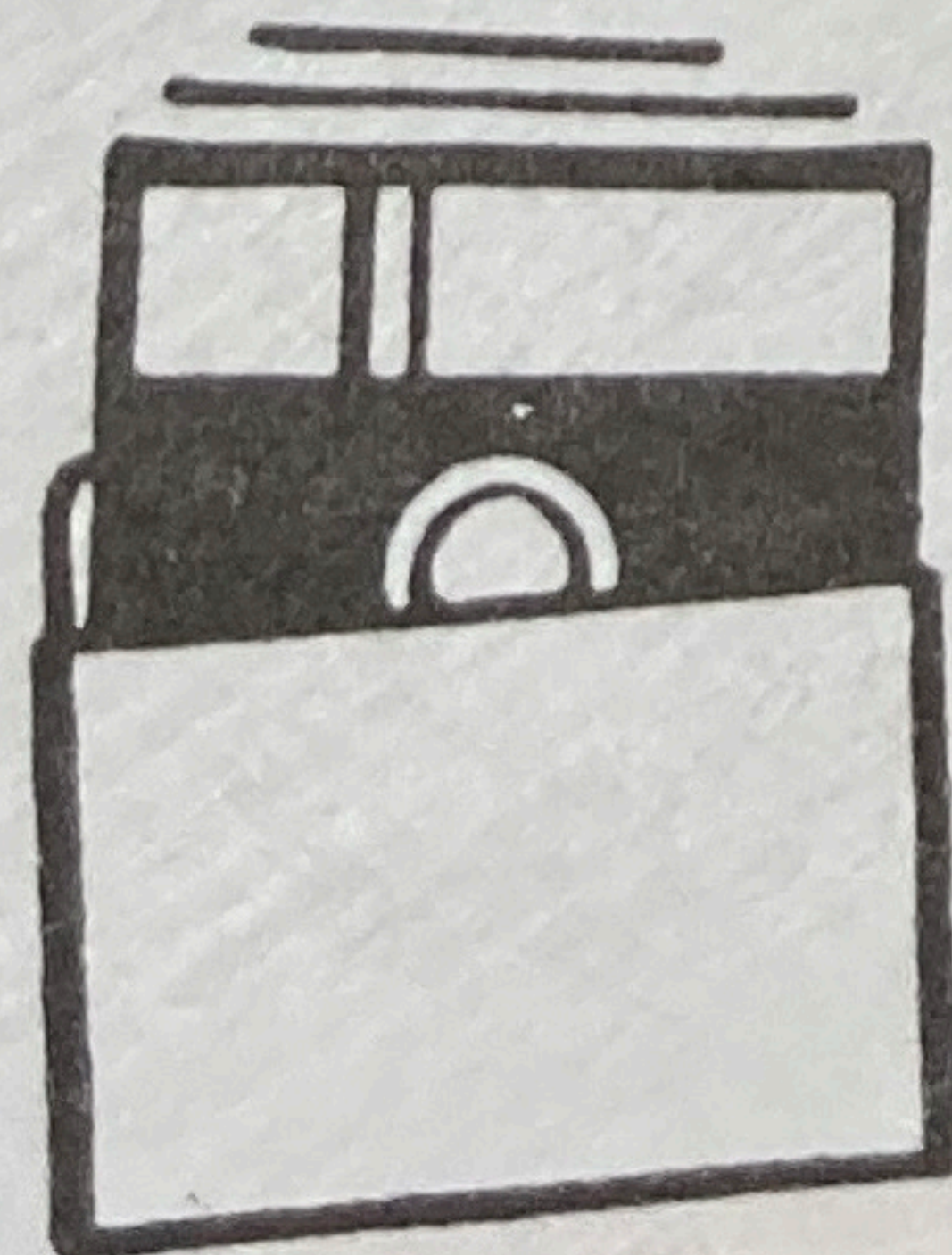
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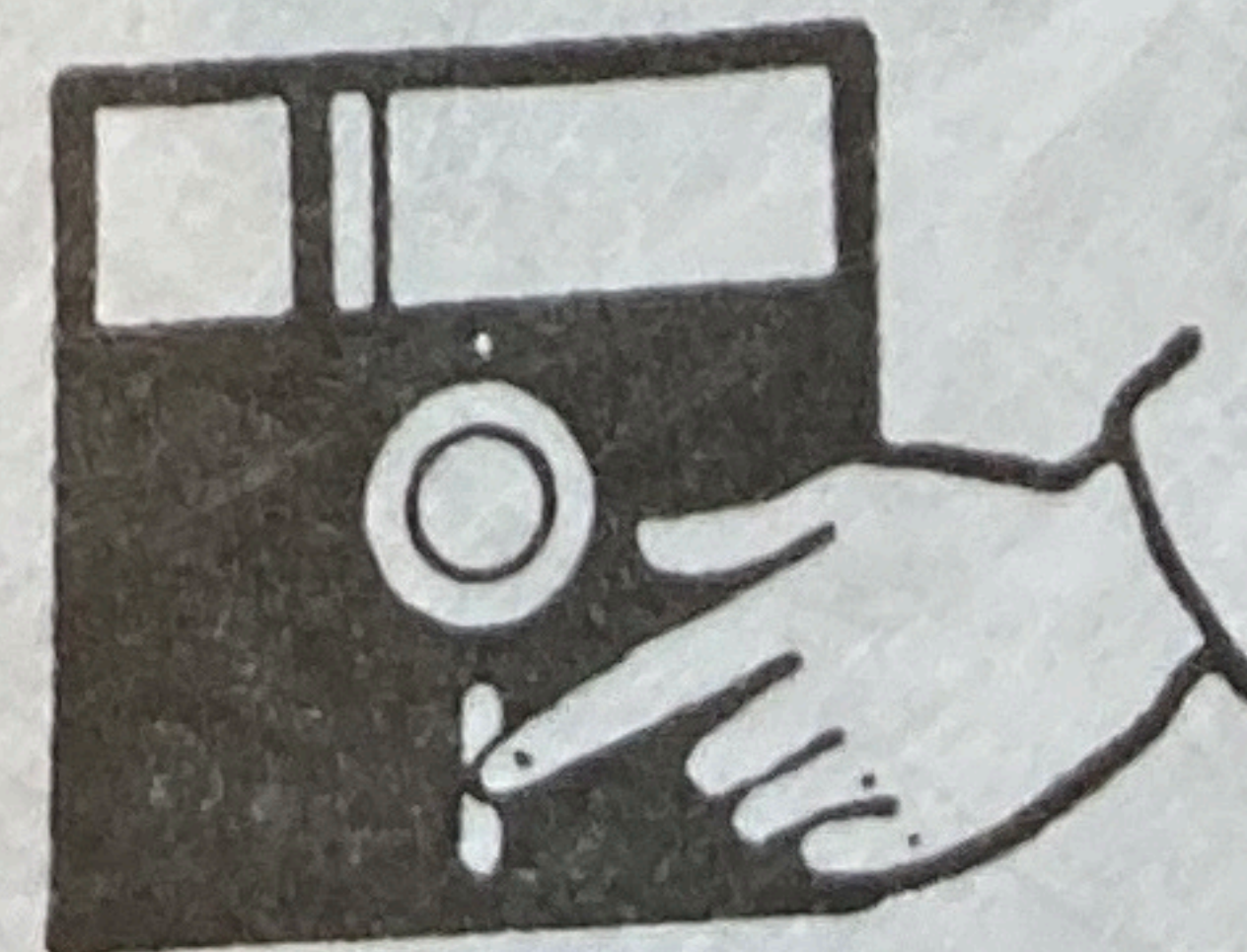
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